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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,218	03/19/2001	Masayuki Shida	09792909-4810	9607

26263 7590 08/26/2003

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EXAMINER
TSANG FOSTER, SUSY N

ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/812,218	SHIDA ET AL.
	Examiner	Art Unit
	Susy N Tsang-Foster	1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *18-26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8-17* is/are rejected.

7)☒ Claim(s) *6 and 7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-17 and the polyvinylidene fluoride species in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 18-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Reference labels 28 and 81 do not appear to be mentioned in the specification. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

On page 1 of the specification, the Japanese Application No. should be P2000-076616, not P2000-076606 as evidenced by the declaration and the foreign priority document submitted.

On page 10, lines 1-3, the statement that the belt-shaped positive electrode collector 25 a is dried and subjected to compression molding is unclear since the positive electrode current collector inherently does not contain a solvent and the current collector cannot be subjected to compression molding since it is made of metal. It appears that the positive electrode mixture slurry applied onto the positive electrode current collector is dried and subjected to compression molding instead.

On page 11, "flowing path 41" should be "flowing path 41b" in order to maintain consistency in the specification. Reference label 41 shows the nozzle in Figure 5.

On page 13, line 5, "propotioning" should be "proportioning"

On page 14, "the density of lithium ion for nonaqueous solvents is preferably in the range of 0.10 to 2.0 mol/l" should be "the concentration of lithium ion for nonaqueous solvents is preferably in the range of 0.10 to 2.0 mol/l" since the unit mol/l is used to express concentration and not density.

On page 16, "pomp" should be "pump".

On page 18, it is unclear how the plastic film can be made of propylene since propylene is a monomer.

On page 19, polyvinylidene does not appear to be a binder or a complete chemical name.

On page 19, the statement that the belt-shaped negative electrode collector is dried and subjected to compression molding" is unclear because the current collector cannot be subjected to compression molding since it is made of metal. It appears that the negative electrode slurry applied onto the negative electrode current collector is dried and subjected to compression molding instead.

In the third paragraph on page 20, it is unclear what "share cut" is.

Appropriate correction is required.

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 11, the limitation "wherein after the electrolyte is delivered and dried, the electrolyte layers are formed on an electrode face; and comprises a step of rolling the electrode face with a plastic film" does not appear to be in the specification.

Claim Objections

7. Claims 5, 9 and 14-17 are objected to because of the following informalities:

In claim 5, the limitation "wherein the positive electrode or the negative electrode is conveyed with a conveying means as being formed the electrolyte layers thereon" is grammatically awkward. It is recommended to the applicant to rewrite the limitation as "wherein the positive electrode or the negative electrode is conveyed with a conveying means as the electrolyte layers are being formed thereon".

In claim 9, "posses" is misspelled.

In claims 14-17, the Markush groups are improperly written and should include the phrase "selected from the group consisting of".

In claim 15, numerous macromolecular compounds are misspelled and applicants are encouraged to review and correct the misspellings. For example, "polyvinylydene fluoride" should be "polyvinylidene fluoride" and "acrylonitrite" should be "acrylonitrile".

In claim 16, "γ-butyl lactone" should be "γ-butylrolactone" and "butylenes carbonate" should be "butylene carbonate".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 4, 6-9, 11, 14, 15, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, the limitation "regions on which the electrode mixture layers are formed are positioned differently in a surface and a back of the electrode collector respectively" is indefinite because it is unclear what the relationship is between a surface and a back of the electrode collector is and how the regions on which the electrode mixture layers are formed are positioned differently. For example, an electrode mixture layer on one surface of the current collector is inherently located in a different position than an electrode mixture layer on the opposite surface

of the current collector. It appears that the limitation should read "a plurality of electrode mixture layers formed on one of a front surface and a back surface of the electrode collector are shorter at one end of each of electrode mixture layers than the corresponding plurality of electrode mixture layers formed on the other one of the front surface and back surface of the electrode collector" in light of the specification and Figures.

In claim 6, the limitation "a filling unit" is indefinite because it is unclear if this filling unit being referred to is the same filling unit recited in claim 1.

Claim 7 recites the limitation "the filling part" in the last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

In claim 8, the limitation "the electrolyte is delivered as being applied heat for adjusting its viscosity" is indefinite because it is unclear where the electrolyte is being delivered and it is also grammatically awkward. For the purposes of prosecution, the limitation is interpreted in light of the specification as "heat is applied to the electrolyte for adjusting its viscosity as the electrolyte is delivered to at least one side of either the positive electrode or the negative electrode".

In claim 9, the limitation "the electrolyte is delivered in a state where the electrolyte is applied to heat in order to posses its viscosity within a range of 0.001 Pa ·s to 0.05 Pa · s" is indefinite because it is unclear where the electrolyte is being delivered to and it is also grammatically awkward. For the purposes of prosecution, the limitation is interpreted in light of the specification as "heat is applied to the electrolyte for adjusting its viscosity to be within a

range of 0.001 Pa ·s to 0.05 Pa · s as the electrolyte is delivered to at least one side of either the positive electrode or the negative electrode."

In claim 11, the limitation "wherein after the electrolyte is delivered and dried, the electrolyte layers are formed on an electrode face; and comprises a step of rolling the electrode face with a plastic film" is indefinite because after the electrolyte layers are formed on an electrode face, it is unclear how a plastic film would be formed on the electrode face since the electrode face is covered with the electrolyte film.

Claim 14 recites the limitation "the lithium salt" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In claim 15, the limitation "metaaclylate" is indefinite because it is unclear what this word means.

In claim 15, the limitation "other macromolecular compounds" is indefinite because it is unclear what these other macromolecular compounds are.

In claim 17, the limitation "macromolecular materials is included" is indefinite because it is unclear what this limitation is modifying in the claim. For example, is this limitation modifying the positive electrode, the negative electrode, or both?

Claims depending from claims rejected under 35 USC 112, second paragraph are also rejected for the same.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Delnick (US 5,865,860).

It is noted that the limitation "by means of a pressurization means" in claim 1 does not invoke 35 USC 112, sixth paragraph according to the guidelines published in the Federal Register, vol. 65, No. 120, on June 21, 2000.

Delnick discloses a method of manufacturing a battery having a positive electrode, a negative electrode, and electrolyte layers (porous separators filled with electrolyte) comprising a step of forming the electrolyte layers (porous separators filled with electrolyte) by pushing electrolyte filled in a filling unit **300** on one side of the electrode/separator bilayers (see abstract) through a ink jet printing head that is electronically pulsed to form and eject the electrolyte droplets from a nozzle of the printing head (see Figure 6 and col. 3, lines 29-50 and col. 4, lines 4-10 and col. 4, lines 50-61 and col. 5, lines 20-31). The electrolyte ejected from the nozzle is placed in a source tank (the filling unit) of the ink jet printer (col. 4, lines 17-21).

12. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fauteux et al. (US 5,776,209).

Fauteux et al. discloses a method of manufacturing a rechargeable lithium battery having a positive electrode, a negative electrode and electrolyte layers (col. 7, lines 25-37) comprising

the step of forming electrolyte layers by pushing electrolyte filled in a filling unit 66 on the positive electrode by a pressurization means (see Figure 2) in the form of conventional gear metering pumps (col. 6, lines 15-25 and col. 7, lines 46-54). The reference labels 28, 29, and 30 are regulating means in a preferred embodiment comprising the conventional metering pumps (col. 6, lines 15-25) and the same regulating means is depicted symbolically in Figure 2 that pumps the electrolyte mixture onto the positive electrode immediately before position indicated by reference label 76 on the conveyor means.

A regulated amount of electrode paste and polymerization initiator is released and applied onto the top surface of the substrate/current collector material in synchronized time increments which implies that the electrode mixture layers are formed intermittently on the face of the electrode current collector (col. 6, lines 39-56).

After polymerization of the positive electrode paste begins on the current collector, a substrate protector means 34 in the form of a plastic film may be applied over the electrode paste prior to curing the positive electrode paste (col. 7, lines 10-25). While the positive electrode is still somewhat soft (partially cured), the electrode (the coated substrate) is further coated with an electrolyte in a similar manner of application for the positive electrode paste (col. 7, lines 60-67 and col. 8, lines 1-11). Following application of the electrolyte, the coated substrate is covered with a treated lithium anode **80** toward the total fabrication of the lithium rechargeable battery (col. 8, lines 19-23). As seen in Figure 2, the anode and the cathode (positive electrode) have belt shape.

13. Claims 1, 5, 12-14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by McAleavey (US 5,496,407).

McAleavey discloses a method of manufacturing a battery having a positive electrode , and a negative electrode, and electrolyte layers, comprising the steps (col. 8, lines 25-34) of: forming electrolyte layers by pushing electrolyte filled in a reservoir or source (filling unit) of an extruder on one side of a positive electrode by forcing electrolyte material from the reservoir or source of an extruder through an orifice of the extruder using a variable speed metering pump which is the same pressurization means disclosed by present applicants (col. 4, lines 55-62).

As seen in Figure 1 of the reference, the positive electrolyte is conveyed with a conveying means as electrolyte layers are being formed thereon. The reference also discloses that materials suitable for use as cathode materials, anode materials, electrolyte materials, and substrate materials disclosed in U.S. Patent No. 4,925,751 are incorporated by reference.

US Pat. No. 4,925,751 discloses that the anode could be lithium, the electrolyte is a single-phase solid solution of an ionizable alkali metal salt, a solvent for the salt, and a polymer and that the cathode can be V_6O_{13} which make up the crucial elements of a solid state lithium rechargeable battery (see col. 2, lines 31-59 of U.S. Pat. No. 4,925,751). Since the electrolyte contains a solvent for the salt in the polymer matrix, the electrolyte is by definition a gel electrolyte. The U.S. Pat. No. 4,925,751 also discloses that the ionizable lithium salt could be $LiAsF_6$, $LiClO_4$, $LiBF_4$ (see col. 5, lines 55-68 of U.S. 4,925,751). Finally, US Pat. No. 4,925,751 also discloses that the solvent for the salt is an aprotic solvent which is a nonaqueous solvent such as propylene carbonate, butyrolactone, and 2-methyltetrahydrofuran (see col. 6, lines 3-20).

14. Claims 1, 5, 8, and 12-17 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by the IPDL JPO Machine Translation for JP 2000-251920 A.

See Figure 2 and paragraphs 9, 12, 15, 18, 19, 23, 25-28, 35-37, and 39 of machine translation for the reference.

15. Claims 1, 5, and 12-17 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by the IPDL JPO Machine Translation for JP 2000-268870 A.

See Figure 2 and paragraphs 11, 14, 18, 21, 23-25, 29, 36-38, 42, and 45 of the machine translation for the reference.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 2, 3, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fauteux et al. (US 5,776,209) in view of Yamashita et al. (US 6,387,564 B1).

Fauteux et al. disclose all the limitations of claims 2, 3, 11 and 17 (see above) except cutting the electrode between the electrolyte layers formed intermittently, that the electrode

mixture layers are formed on both faces of the electrode collector, and that the positive electrode includes lithium mixed oxides with the composition formula Li_xMO_2 (here, x satisfies $0.05 < x < 1.12$, and M is more than one kind of transition metal) and the negative electrode includes as a material capable of occluding and releasing lithium selected from the group consisting of carbonaceous materials, silicon, silicon compounds, and metal oxide.

Yamashita et al. teach cutting the electrode between gaps of electrode mixture layers formed on a electrode current collector in order to obtain a positive electrode, a negative electrode and an aggregation layer of insulating particles between the positive electrode and the negative electrode (the layer of aggregation of insulating particles with polyvinylidene fluoride binder is a precursor to the electrolyte gel layer formed (also called the separator in the reference) once the electrolyte solution is added to the battery) in order to form a battery element (col. 27, lines 3-15).

Yamashita et al. also teach that electrode mixture layers can be formed on one or both surfaces of a positive or negative electrode collector (col. 17, lines 40-50).

Yamashita et al. also teach a lithium secondary battery wherein the positive electrode active material can be a lithium composite metal oxide capable of occluding and releasing lithium ion given by the formula $Li_xM^{I}_{(1-y)}M^{II}_y O_2$ where ($0<x\leq1.1$, $0\leq y\leq1$, and M^{I} and M^{II} are each at least one element selected from the group consisting of Co, Cr, Mn, Fe, and Ni (col. 8, lines 15-25) and that the negative electrode active material used in lithium ion secondary battery can include carbonaceous materials such as coke, graphite, amorphous carbon and metal oxides and alloys including Si, Ge, Sn, Pb, Al, In, and Zn which are capable of occluding and releasing lithium ions (col. 8, lines 26-32).

Yamashita et al. also teach macromolecular binders for use in forming the electrodes of lithium secondary batteries (col. 8, lines 33-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to cut the electrode between gaps of electrode mixture layers formed on the positive electrode current collector of Fauteux et al. once the anode **80** is covered onto the electrolyte layer shown in Figure 2 in order to form a battery element. Since the electrolyte layers are deposited intermittently on the battery method of Fauteux et al. on electrode mixture layers that are formed intermittently on the electrode current collector, cutting the electrode in between the electrode mixtures formed intermittently on the electrode current collector also cuts the electrode in between the electrolyte layers formed intermittently.

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to form electrode mixture layers on both surfaces of the positive or negative electrode current collector in order to increase the capacity of the battery.

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to have in the positive electrode material in the lithium secondary battery of Fauteux et al. a lithium composite metal oxide capable of occluding and releasing lithium ion given by the formula $Li_xM^{I}_{(1-y)}M^{II}_y O_2$ where ($0<x\leq 1.1$, $0\leq y\leq 1$, and M^{I} and M^{II} are each at least one element selected from the group consisting of Co, Cr, Mn, Fe, and Ni (col. 8, lines 15-25) and in the negative electrode active material in the lithium secondary battery of Fauteux et al. t a material selected from the group consisting of carbonaceous materials such as coke, graphite, amorphous carbon and metal oxides and alloys including Si, Ge, Sn, Pb, Al, In, and Zn which are capable of occluding and releasing lithium ions because these materials are suitable and

conventionally used as positive and negative electrode active materials respectively for lithium rechargeable batteries.

Finally, it would have also been obvious to one of ordinary skill in the art to use macromolecular binders in forming the electrodes for lithium secondary battery of Fauteux et al. because macromolecular binders hold the active material together to a preformed shape of an electrode.

18. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fauteux et al. (US 5,776,209) in view of Yamashita et al. (US 6,387,564 B1)as applied to claim 2 above, and further in view of Fukumura et al. (US 6,027,835).

Fauteux et al. in combination with Yamashita et al. teach all the limitations of claim 4 (see above) except that a plurality of electrode mixture layers formed on one of a front surface and a back surface of the electrode collector are shorter at one end of each of electrode mixture layers than the corresponding plurality of electrode mixture layers formed on the other one of the front surface and back surface of the electrode collector.

Fukumura et al. teach forming electrode mixture layers on both the top and bottom surface of an electrode current collector where the electrode mixture layer on one surface is shorter at one end of the electrode mixture than the corresponding electrode mixture layer on the other surface of the current collector because this configuration of the two electrode mixture layers on opposite surfaces of the current collector prevents breakage of the electrode sheet during an electrode manufacture process especially when the electrode sheet is compressed during the transport of the electrode sheet by press rollers (see Figure 4c and col. 1, lines 40-67 and col.4, lines 47-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have each of the plurality of electrode mixture layers formed on one of a front surface and a back surface of the electrode collector are shorter at one end of each of electrode mixture layers than the corresponding plurality of electrode mixture layers formed on the other one of the front surface and back surface of the electrode collector because this configuration of the two electrode mixture layers on opposite surfaces of the current collector prevents breakage of the electrode sheet during an electrode manufacture process especially when the electrode sheet is compressed during the transport of the electrode sheet by press rollers in the conveyor means shown in Figure 2 of Fauteux et al.

19. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAleavey (US 5,496,407) in view of Taniuchi et al. (US 5,925,283).

McAleavey discloses of claim 15 except the macromolecular compound of the electrolyte is polyvinylidene fluoride.

Taniuchi et al. teaches that polyvinylidene fluoride can be used as a gel electrolyte for a lithium battery (col. 5, lines 10-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use polyvinylidene fluoride as the macromolecular compound of the electrolyte for a lithium secondary battery because it is chemically compatible with the environment of a lithium battery and the polyvinylidene fluoride gel electrolyte is capable of providing an gel

electrolyte that is high ionic conductivity and sufficiently high solid strength (col. 1, lines 45-57 of Taniuchi et al.).

Double Patenting

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

21. Claims 1-4, and 8-16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-8, and 10-16 are of copending Application No. 09/811,898. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending claims of application number 09/811,898 contain all the limitations of the present claims and therefore anticipate the present claims. An electrolyte-delivering machine having a pressurization means inherently must have a filling unit in order to hold the source of electrolyte that is being pushed. Anticipation is the epitome of obviousness, see *In re Skoner*, 517 F. 2d 947, 950, 186 USPQ 80, 83 (CCPA 1975).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

22. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications should be directed to examiner Susy Tsang-Foster, Ph.D. whose telephone number is (703) 305-0588. The examiner can normally be reached on Monday through Thursday from 9:30 AM to 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at (703) 308-2383. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900.

The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9310 for regular communications and (703) 872-9311 for After-Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

st/ Susy Tsang-Foster

Susy Tsang-Foster
Primary Examiner
Art Unit 1745